

Trends of Population Ageing from 1950-2050: A Comparative Study Between Bangladesh and World

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Abstract: Population ageing-the process by which older individuals become a proportionally larger share of the total population-was one of the most distinctive demographic events of the 20th century. It will surely remain important through out the 21st century. Initially experienced by more developed countries, the process has recently become apparent in much of developing world like Bangladesh as well. Since, the older population is growing at a considerably faster rate and the life expectancies are increased with the advancement of time, the elderly should be considered not as a burden to the society but their valuable experience should be utilized fruitfully and it should be the responsibility of not only society and the government but also the people. The state has not yet develops the mechanisms to respond to the emerging ageing challenge.

Key words: Population ageing, survival rate, ageing index, Bangladesh and world, mechanisms

INTRODUCTION

Both developing and major developed countries of the world are facing global aging of their populations. As economic and social development occur, the proportion of elderly in a population tends to increase due to declines in fertility and mortality rates; immigration and emigration patterns and longer life spans (Olson, 1990; Rice, 1996). Each of these causes is in turn related to other factors, which are often the indirect by-products of industrialization and accompanying urbanization of the population (Lei and Yang, 1994; Martin, 1991). For the near future, virtually all countries will face population ageing, although, at varying levels of intensity and in different time frames. The shift in age structure associated with population ageing has a profound impact on a broad range of economic, political and social conditions. For example, concerns are growing about the long-term viability of intergenerational social support systems, which are crucial for the well-being of both the older and younger generations (Cliquet and Nizamuddin, 1999). Like so many countries of the Asia-Pacific region, Bangladesh has experienced a steady decline in mortality accompanied by modest decline in fertility (Mabud, 1987; Kabir and Uddin, 1987).

As the impact of population ageing on the society's socio-economic conditions may be amplified by the speed with it occurs, it is important to consider not only the

degree but also the pace of the changes in the age structure. When the proportion of older persons in the total population increases dramatically in a short period of time, as is currently occurring in some countries in both the more developed and less developed regions, it becomes particularly difficult for the social and economic institutions to adjust. An increasing proportion in the older ages necessarily affects the relative importance of the other segments. These changes in age composition can dramatically affect society's political, economic and social structure. The shifting weights of the various age groups tend to create social and political pressure on a society to change its pattern of resource distribution, generating conditions that may give rise to intergenerational conflict (Walker, 1990; Jackson, 1998).

As more people live longer, retirement, pensions and other social benefits tend to be extending over longer periods of time. This makes it necessary for social security systems to change substantially in order to remain effective (Creedy, 1998; Bravo, 1999). Increasing longevity can also result in rising medical costs and increasing demands for health services, since older people are typically more vulnerable to chronic diseases (De Jong-Gierveld and Van Solinge, 1995; Holliday, 1999). The process of ageing in Bangladesh now is taking place at a time when the pattern of life is changing, kinship bonds are weakening and family composition is undergoing a rapid transformation. But with their rapid

increase and under the condition of changing family pattern, the elderly population already seems to be experiencing difficulties (Rahman *et al.*, 2007). The old age segment of the population represents an important subset of the aggregate population and the elderly as a separate and identifiable group with their own specific needs has emerged as an issue quite recently.

It is need to provide an overview of the population ageing process, focusing on some particularly relevant public policy issues. In dealing with each of the issues, attention is given to the course of the ageing process, which has not been the same in all countries in the world. There has been considerable variation in timing, levels and patterns. Therefore, the assessment of the general trends is disaggregated into development regions and major geographic areas wherever possible. That's why this research tries to make a comparative study of ageing trends and the life expectancies between Bangladesh and world.

MATERIALS AND METHODS

The study is based on the data of United Nations. We have mainly obtained our required data from world population ageing: 1950-2050 and world population prospectus. The 2006 revision population database.

RESULTS AND DISCUSSION

Some aging indicators

Median age: Figure 1 shows the increase trend in median age over the next half century i.e., 2000-2050, not only for Bangladesh but also for the world. Among many indicators of whether a population is ageing or not; the median age, which divides the population into 2 equal parts, half older and half younger is perhaps the strongest one. One common measure of population ageing is the increase in the median age of its members (Gavrilov and Heuveline, 2003). During the last 50 years, the median age of the Bangladeshi population decreased by about 2 years form nearly 22 years in 1950 to nearly 20 years in 2000. But it is projected to increase by about 15 years over the next half century. Median age during the last 50 years for the world's population increased by about 3 years form nearly 24 years in 1950 to nearly 27 years in 2000 and it also projected to increase by about 10 years by the year 2050.

Index of ageing: The ageing index i.e., the ratio of the people aged 60 or over to children under 15 years of age will be about 5.7 and 3 times over the next half century for Bangladesh and world, respectively (Fig. 2). The ageing index is significantly higher in the world but will grow faster in Bangladesh. The growing number of older persons and reduction of young population increase

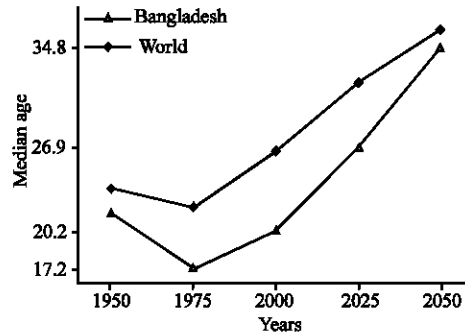


Fig. 1: Median age: Bangladesh and world

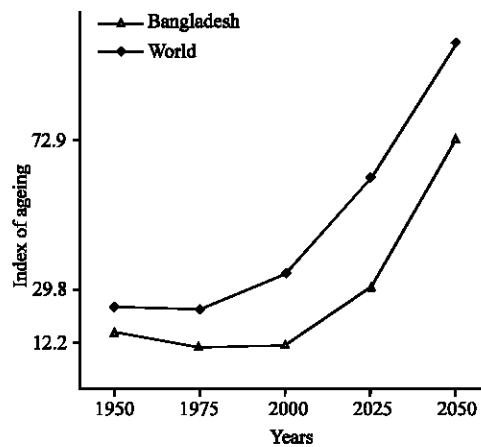


Fig. 2: Index of ageing: Bangladesh and world

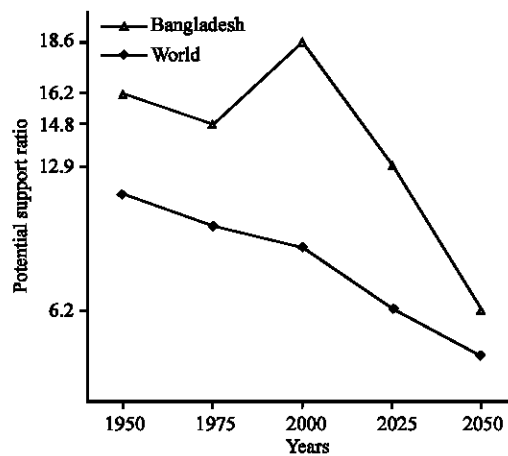


Fig. 3: Potential support ratio: Bangladesh and World

the index of ageing reflecting the change in the age structure composition of population of Bangladesh as well as for world.

Potential support ratio: Figure 3 shows a decline trend in potential support ratio both for the world and Bangladesh. The potential support ratio i.e., the number of persons

aged 15-64 years/one person aged 65 years or older indicates the dependency burden on potential workers. It has important implications for social security schemes, particularly traditional systems in which current workers pay for the benefits of the current retirees. With the advancement of time this ratio is expected to decline and is expected to fall from about 19-6 people in the working age per each person 65 years or older for the next 50 years for Bangladesh. Potential support ratio also fell from 9-5 people for the next 50 years for the world.

Magnitude and speed of population ageing: Table 1 shows an increasing trend in percentage for 60+, 65+ and 80+ aged population for the next 50 years not only for Bangladesh but also at global level. The increasing proportions of aged persons have been accompanied, in most populations, by steady declines in the proportion of young persons. Table 1 also shows that the older population is growing faster than the total population for both Bangladesh and the global level and the difference in growth rates is increasing. The rapid growth of the oldest group among the older population is of special relevance in terms of public policy. In case of both

Bangladesh and world, the 80 and over age group is growing faster than any other and is expected to continue as the fastest growing segment of the population for at least next 50 years. Although, this group still constitutes as small proportion of the total population, its numbers are becoming increasingly important, especially in Bangladesh.

The survival rate to a specific age X is the proportion of newborns in a given year who would be expected to survive at age X if current mortality trends were to continue for at least the next X years. From Table 1 we observed that as time passes the survival rates for 60+, 65+ and 80+ is increasing both for Bangladesh and global level. Improved changes of surviving to the old age may be a reflection of spur efforts of improved health status, medical technologies, health facilities etc. of the older persons.

Demographic profile of the older population: The dependency ratio is a simple statistics measure or the impact of the age structure on the economic potential of the population. Table 2 represents a decreasing trend in total, youth and old age dependency ratio with the

Table 1: Size, growth and survival

Indicators	Years									
	1950		1975		2000		2025		2050	
	BD	WO	BD	WO	BD	WO	BD	WO	BD	WO
Percentage										
60+	6.2	8.2	5.5	8.6	4.9	10.0	8.4	15.0	16.0	21.1
65+	3.6	5.2	3.5	5.7	3.1	6.9	5.2	10.4	10.9	15.6
80+	0.2	0.5	0.3	0.8	0.3	1.1	0.6	1.9	1.6	4.1
Indicators	1950-55		1975-80		2000-05		2025-30		2045-50	
	BD	WO	BD	WO	BD	WO	BD	WO	BD	WO
Growth rate percentage										
Total	2.0	1.8	2.4	1.7	2.1	1.2	1.1	0.8	0.7	0.5
60+	1.6	1.8	1.0	1.8	2.9	1.9	4.1	2.8	3.1	1.6
65+	1.9	2.1	2.0	2.6	3.0	2.3	4.7	3.1	3.5	1.6
80+	4.1	3.1	3.0	2.7	3.0	3.8	3.7	3.9	4.8	3.0
Survival rate percentage										
60+	-	-	-	-	66.2	73.8	82.1	82.1	88.7	86.7
65+	-	-	-	-	58.4	67.5	75.0	77.0	82.9	82.2
80+	-	-	-	-	21.7	33.9	33.9	45.0	43.4	51.7

Table 2: Dependency ratio and sex ratio

Indicators	Years									
	1950		1975		2000		2025		2050	
	BD	WO	BD	WO	BD	WO	BD	WO	BD	WO
Dependency ratio										
Total	70.2	65.2	95.4	73.7	71.9	58.4	50.0	53.2	49.0	57.7
Youth	64.0	56.7	88.6	63.8	66.9	47.5	42.2	37.3	32.8	33.1
Old age	6.2	8.6	6.8	9.9	5.4	10.9	7.8	15.9	16.2	24.7
Sex ratio (per 100 women)										
Total	106.4	99.8	107.0	101.2	105.3	101.7	103.1	101.1	100.3	100.0
60+	112.3	80.1	125.4	78.1	100.4	81.2	98.8	84.4	93.8	85.0
65+	100.8	75.5	120.5	73.7	101.3	76.2	95.8	79.9	90.9	80.6
80+	100.0	61.4	116.9	58.1	98.2	53.1	78.5	57.7	77.0	60.7

BD = Bangladesh; WO = World

Table 3: Life expectancy

Indicators	Bangladesh					World				
	1950-55	1975-80	2000-05	2025-30	2045-50	1950-55	1975-80	2000-05	2025-30	2045-50
Life expectancy (years)										
Birth	36.6	46.7	60.7	70.6	75.0	46.5	59.8	66.0	72.4	76.0
60	-	-	15.8	17.6	19.2	-	-	18.8	21.0	22.2
65	-	-	12.6	14.0	15.4	-	-	15.3	17.2	18.2
80	-	-	5.4	5.9	6.5	-	-	7.2	8.2	8.8

advancement of time for Bangladesh as well for world for the next 50 years. Currently, the younger population accounts for the large majority of the world dependent-age population. In the future, the balance between the youth component of the dependency ratio and the old-age component will become more equal. Table 2 also shows that the old-age dependency ratio will be almost triple in Bangladesh and it will be more than double in the world during the next half century.

Women made up a significant majority of the older population; the female share increases with age. Because their life expectancy is greater than men, women comprise a significant majority of the older population. Table 2 shows that the total sex ratio is decreasing with the advancement of time both for Bangladesh and world during the next 50 years. From Table 2 a different pattern in sex ratio also observed between Bangladesh and world during the next half century. Sex ratios at older ages are expected to rise globally and these ratios are expected to fall for Bangladesh over the next half century.

Life expectancies: Table 3 shows the increasing trend in life expectancies at birth and at age 60, 65 and 80, which indicates the reduction in mortality in Bangladesh as well as in the world. During the last 50 years, life expectancy at birth in Bangladesh is significantly lower than the world. The gap in life expectancy among Bangladesh and world will tend to decrease. By the end of the next half century, life expectancy at birth is expected to reach 75 years in Bangladesh and 76 years in the world. In proportional terms, gains in life expectancy are expected to be higher at older ages. Table 3 shows that in fact, the older the age group, the more remarkable are the expected relative gains in life expectancy.

CONCLUSION

Ageing is a part of our life cycle. Demographically, population is a global phenomenon and Bangladesh is also not left untouched by this demographic reality. It is profound, having major consequences and implications for all facets of human life. In the economic area, population ageing will have an impact on economic growth, savings, investment and consumption, labour

markets, pensions, taxation and intergenerational transfers. In the social sphere, population ageing affects health and health care, family composition and living arrangements, housing and migration. This process may have a significant impact on the well-being of older persons, especially in the less developed regions where social support for the older persons is largely provided by the immediate family (Hoyert, 1991; Wolf, 1994).

Since, the older population is growing at a considerably faster rate, there is need for changing in the attitude of not only community and the government but also the people. The elderly should not be considered as a burden to the society but their valuable experience should be utilized fruitfully and it should be the responsibility of the society and the government to impart an improved and effective quality of life to them in return to their lifelong dedicated service towards their children and the nation. The challenge for the future is to ensure that people every where will be enable to age with security and dignity and continue to participate in their societies as citizens with full rights. At the same time the rights of older persons should not b incompatible with those of other age groups and the reciprocal relationships between the generations must be nurtured and encouraged (United Nations, 2001). The state has not yet develop the mechanisms to respond to the emerging ageing challenge. It is high time that Bangladeshi policy makers give due importance to the forthcoming age wave. There are many lessons that can be learnt from the experience of industrial societies who are facing the problems associated with an increase in their ageing population. Carefully planning should make it possible for Bangladesh to take the best from the developed world's experience while avoiding negative features.

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